

GNFAC Avalanche Advisory for Wed Dec 21, 2016

Good Morning. This is Doug Chabot with the Gallatin National Forest Avalanche Advisory issued on the winter solstice, Wednesday, December 21st at 7:30 a.m. Today's advisory is sponsored by [Bountiful Table](#) and **Javaman**. This advisory does not apply to operating ski areas.

Mountain Weather

In the last 24 hours Hyalite picked up 2" while the mountains around Big Sky to West Yellowstone and Cooke City received 4-6". Winds blew strong out of the west to northwest at 20-30 mph with gusts near 60. This morning mountain temperatures are 5-10F under clear skies. A high pressure system today and tomorrow will bring sunshine and daytime highs in the low 20s with west winds at 10-20 mph.

Snowpack and Avalanche Discussion

Cooke City Southern Gallatin Range Southern Madison Range Lionhead area near West Yellowstone

Yesterday's snowfall of 4-6" (.5" [SWE](#)) got blown around last night. The mountains have been blasted by the wind the last couple of days and wind-loaded slopes have the greatest likelihood of avalanching from human triggers.

On most slopes a weak layer of sugary, faceted snow is found near the ground. This layer produced large avalanches around Cooke City and Taylor Fork during the avalanche warnings ([many photos](#)) on Friday and Saturday. Furthermore, a snowmobiler triggered an avalanche near Daisy Pass on Sunday that broke 2-5' deep on these facets. A person has 3 choices to deal with this layer:

1. Assume it is on every slope and assume you might be able to trigger it.
2. Pretend it is not there.
3. Take time to dig snowpits, do stability tests and track where it might be safe.

#1 is the most conservative and least fun while #2 is gambling (the "house" eventually wins), and #3 involves gathering information and making an educated decision. I move between #1 and #3 and avoid the wishful thinking of #2. Regardless, no matter which you choose the snowpack doesn't care; it's just a snowpack. For today, the avalanche danger on all wind-loaded slopes or on any slope steeper than 35 degrees is rated [**CONSIDERABLE**](#). All other slopes have a [**MODERATE**](#) danger.

Bridger Range Northern Gallatin Range Northern Madison Range

Eric rode and skied into the [Throne](#) of the northern Bridger Range while I toured along the Bridger ridge to Saddle Peak. Winds brutalized the snowpack and Eric noted, "Overall, the skiing quality was worse than the stability." The winds exposed dirt, formed punishing ribs of [sastrugi](#) and loaded slopes with thick hard slabs. My partners and I intended to ski off Saddle Peak, but unanimously changed our minds when we saw acres of hard slabs that were likely sitting on a weak layer of facets. We have yet to dig a pit and not find them. This weak layer was at the head of Truman Gulch and also on the Football Field near the southern boundary of Bridger Bowl which we found on our retreat ([video](#)). Weak snow at the ground is breaking in our tests and the overall poor snow structure reinforces the possibility of a large avalanche ([snowpit profile](#)). For today, the avalanche danger is rated [**CONSIDERABLE**](#) on wind-loaded slopes steeper than 35 degrees and [**MODERATE**](#) on all other slopes.

Eric will issue the next advisory tomorrow morning by 7:30 a.m.

We rely on your field observations. Send us an email with simple weather and snowpack information along the lines of what you might share with your friends: How much new snow? Was the skiing/riding any good? Did you see any avalanches or signs of instability? Was snow blowing at the ridgelines? If you have snowpit or test data we'll take that too, but this core info is super helpful! Email us at mtavalanche@gmail.com or leave a message at 406-587-6984.

Upcoming Events and Education

COOKE CITY

Tuesday, December 27 and Wednesday, December 28, **Weekly rescue training and snowpack update**, 6-7:30 p.m., Soda Butte Lodge on Tuesday, Field location Wednesday TBA.

Every Friday and Saturday, **Weekly rescue training and snowpack update**, 6-7:30 p.m., Soda Butte Lodge on Friday, Field location Saturday TBA.